

REMARKS

The outstanding issues in the instant application are as follows:

- Claims 1, 2, 4, 5, 8, 9, 11, and 12 are rejected under 35 U.S.C. §102(a).

Applicant hereby traverses the outstanding objections and rejections, and requests reconsideration and withdrawal in light of the amendments and remarks contained herein. Claims 1 – 12 are pending in this application.

I. AMENDMENTS

Applicants amended paragraph [0004] of the specification to recite that air also flows in a direction perpendicular to “one or more thermal plates.” Applicants further amended claim 9 to recite “air flowing in: a direction perpendicular to said one or more thermal plates,” and claim 11 to recite, “means for fanning air in a direction perpendicular to one or more thermal plates.” Support for these amendments can be found, at least, in paragraphs [0013] and [0015] and in FIGURES 2 and 4. No new matter was added. Applicants amended the specification and claims to more accurately describe the scope and nature of the claimed invention. The amendments were not made to overcome any of the Examiner’s rejections to the claims.

Applicants amended claim 1 to require, “an opening fashioned in each one of said plurality of thermal plates, wherein said opening allows airflow through said each one of said plurality of thermal plates in a direction perpendicular to said plurality of thermal plates.” Support for this amendment can be found, at least, in claims 5 and 9, as originally filed, and in paragraphs [0013] and [0015], and in FIGURES 2 and 4. No new matter was added.

II. REJECTIONS UNDER 35 U.S.C. § 102(a)

Claims 1 – 12 stand rejected under 35 U.S.C. §102(a) as being anticipated by U.S. Patent No. 6,625,021 to Lofland, et al. (hereinafter *Lofland*).

It is well settled that to anticipate a claim, the reference must teach every element of the claim, see M.P.E.P. §2131. Moreover, in order for a prior art reference to be anticipatory under 35 U.S.C. § 102 with respect to a claim, “[t]he elements must be arranged as required by the claim,” see M.P.E.P. §2131, citing *In re Bond*, 15 US.P.Q.2d 1566 (Fed. Cir. 1990).

Furthermore, in order for a prior art reference to be anticipatory under 35 U.S.C. §102 with respect to a claim, “[t]he identical invention must be shown in as complete detail as is contained in the . . . claim,” see M.P.E.P. §2131, *citing Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913 (Fed. Cir. 1989). Applicants respectfully assert that the rejection does not satisfy these requirements.

A. Claims 1, 2, and 4

Claim 1, as amended, requires, “an opening fashioned in each one of said plurality of thermal plates, wherein said opening allows airflow through said each one of said plurality of thermal plates in a direction perpendicular to said plurality of thermal plates.” The heat sink described in *Lofland* includes an opening through each of its thermal fins; however, it teaches that a fan is positioned orthogonally to the fins within the space created in the heat sink by the fin openings. This position of the fan, within this space, would preclude airflow passing through the openings in a direction perpendicular to the thermal fins. Moreover, the fan circulating air parallel to the fins, as described and illustrated in *Lofland*, would prevent or counteract any perpendicular airflow through the openings in the *Lofland* thermal fins. Thus, *Lofland* does not teach each and every limitation and/or element of claim 1.

Claim 2 requires, “a fan mounted in relation to said heat sink where said fan manipulates airflow down through each of said openings.” As noted above, *Lofland* teaches a fan mounted within a space created by the openings and circulating air parallel to the thermal fins. Therefore, *Lofland* does not teach or even suggest that the fan would circulate air perpendicularly to the thermal fins through the openings, in which the *Lofland* fan is installed.

Claims 2 and 4 depend directly from base claim 1 and, thus, inherit all of claim 1’s limitations. By virtue of this dependence and/or the additional features described in claim 2, claims 2 and 4, therefore, each sets forth features and limitations not recited by *Lofland*. Thus, Applicants respectfully assert that, for the above reason, claims 1, 2, and 4 are patentable over the 35 U.S.C. §102 rejection of record.

B. Claims 5 and 8

Claim 5 requires, “exchanging heat from said plurality of heat pipes and said set of thermal fins to air flowing in: ... a direction through an aperture in each one of said set of thermal fins.” As noted above, the heat sink described in *Lofland* includes an aperture through each of its thermal fins; however, it teaches that a fan is positioned orthogonally to the fins within the space created in the heat sink by the fin apertures. This positioning of the fan would preclude airflow in a direction through the aperture in each one of the thermal fins. Moreover, the fan circulating air parallel to the fins, as described and illustrated in *Lofland*, would prevent or counteract any airflow through the apertures in the *Lofland* thermal fins. Thus, *Lofland* does not teach each and every limitation and/or element of claim 5.

Claim 8 depends directly from base claim 5 and, thus, inherit all of claim 1’s limitations. By virtue of this dependence, claim 8, therefore, sets forth features and limitations not recited by *Lofland*. Thus, Applicants respectfully assert that, for the above reason, claims 1 and 8 are patentable over the 35 U.S.C. §102 rejection of record.

C. Claims 9, 11, and 12

Claim 9, as amended, requires, “means for transferring heat from said plurality of conductive columns and said one or more thermal plates to air flowing in: a direction perpendicular to said one or more thermal plates.” As noted above, the heat sink described in *Lofland* includes an orifice through each of its thermal plates; however, it teaches that a fan is positioned orthogonally to the plates within the space created in the heat sink by the plate orifices. This positioning of the fan would preclude airflow in a direction through the orifice in each one of the thermal plates. Moreover, the fan circulating air parallel to the plates, as described and illustrated in *Lofland*, would prevent or counteract any airflow through the orifices in the *Lofland* thermal plates. Thus, *Lofland* does not teach each and every limitation and/or element of claim 9.

Claim 11 requires, “means for fanning air in a direction perpendicular to one or more thermal plates, wherein said air flows through said orifice.” As noted above, *Lofland* teaches a fan mounted within a space created by the orifices and circulating air parallel to the thermal plates. Therefore, *Lofland* does not teach or even suggest that the fan would circulate air

perpendicularly to the thermal plates through the orifices, in which the *Lofland* fan is installed.

Claims 11 and 12 depend directly from base claim 9 and, thus, inherit all of claim 9's limitations. By virtue of this dependence and/or the additional features described in claim 11, as amended, claims 11 and 12, therefore, each sets forth features and limitations not recited by *Lofland*. Thus, Applicants respectfully assert that, for the above reason, claims 9, 11, and 12 are patentable over the 35 U.S.C. §102 rejection of record.

III. ALLOWABLE SUBJECT MATTER

The Examiner is thanked for indicating that claims 3, 6, 7, and 10 each contain subject matter that would be allowable if rewritten in independent form. However, Applicant believes that, based on the amendments and remarks herein, all of the claims are now in a condition for allowance.


In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-2025, under Order No. 200209688-1 from which the undersigned is authorized to draw.

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV482746129US, in an envelope addressed to: MS Amendment, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Date of Deposit: January 25, 2005

Typed Name: June Nguyen

Signature: 

Respectfully submitted,

By 

Thomas J. Meaney
Attorney/Agent for Applicant(s)
Reg. No.: 41,990

Date: January 25, 2005

Telephone No. (214) 855-8230